

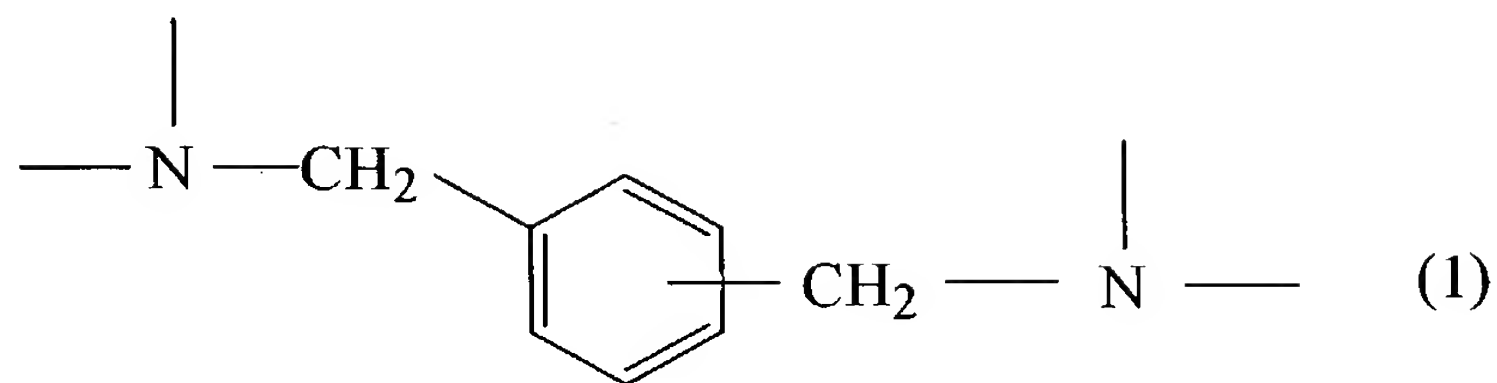
WHAT IS CLAIMED IS:

1. A fuel system comprising a fuel vessel, molded parts for the fuel vessel and/or a tube for a fuel in which bodies are constituted from a thermoplastic resin and/or a rubber, wherein a coating layer is formed on the surfaces in at least one sides of the insides and the outsides of the fuel vessel body, the molded part bodies for the fuel vessel and/or the tube body for a fuel or at least one of connected parts in these bodies; the above coating layer is formed by curing an epoxy resin composition comprising an epoxy resin and an epoxy resin curing agent as principal components; and the above coating layer has a gasoline permeability coefficient of $2 \text{ g}\cdot\text{mm}/\text{m}^2\cdot\text{day}$ or less at 23°C and a relative humidity of 60 % RH.

2. The fuel system as described in claim 1, wherein the gasoline permeability coefficient is $0.2 \text{ g}\cdot\text{mm}/\text{m}^2\cdot\text{day}$ or less.

3. The fuel system as described in claim 1, wherein a skeletal structure represented by Formula (1) which is contained in the coating layer formed by curing the epoxy resin composition described above accounts

for 30 % by weight or more



4. The fuel system as described in claim 1, wherein the epoxy resin described above comprises at least one selected from an epoxy resin having a glycidylamine part derived from metaxylylenediamine, an epoxy resin having a glycidylamine part derived from 1,3-bis(aminomethyl)-cyclohexane, an epoxy resin having a glycidyl ether part derived from bisphenol F and an epoxy resin having a glycidyl ether part derived from resorcinol.

5. The fuel system as described in claim 1, wherein the epoxy resin described above comprises the epoxy resin having a glycidylamine part derived from metaxylylenediamine and/or the epoxy resin having a glycidyl ether part derived from bisphenol F as a principal component.

6. The fuel system as described in claim 1, wherein the epoxy resin described above comprises the resin having a glycidylamine part derived from

metaxylylenediamine as a principal component.

7. The fuel system as described in claim 1, wherein the epoxy resin curing agent described above comprises a reaction product of (A) and (B) or a reaction product of (A), (B) and (C) each described below:

(A) metaxylylenediamine or paraxylylenediamine,

(B) a multifunctional compound having at least one acyl group which can form an amide group part by reacting with polyamine to form an oligomer,

(C) monovalent carboxylic acid having 1 to 8 carbon atoms and/or a derivative thereof.

8. The fuel system as described in claim 7, wherein the multifunctional compound (B) described above is acrylic acid, methacrylic acid and/or a derivative thereof.

9. The fuel system as described in claim 1, wherein the coating layer is formed on any surface of the inside and the outside of the fuel vessel body constituted from a thermoplastic resin at an area rate of 50 to 100 %.

10. The fuel system as described in claim 9, wherein the thermoplastic resin constituting the fuel vessel body is a polyolefin resin.

11. The fuel system as described in claim 10, wherein the thermoplastic resin constituting the fuel vessel body is a polyethylene resin.

12. The fuel system as described in claim 1, wherein the coating layer is formed on at least one sides of the insides and the outsides of the molded part bodies for the fuel vessel constituted from a thermoplastic resin.

13. The fuel system as described in claim 12, wherein the thermoplastic resin constituting the molded part bodies for the fuel vessel is a polyolefin resin.

14. The fuel system as described in claim 13, wherein the thermoplastic resin constituting the molded part bodies for the fuel vessel is a high density polyethylene resin.

15. The fuel system as described in claim 1, wherein the tube comprises the tube body molded from a

thermoplastic resin and/or a rubber and the coating layer formed on an external surface and/or an internal surface of the above tube.

16. The fuel system as described in claim 15, wherein the thermoplastic resin of the tube body is at least one selected from a polyolefin resin, a polyurethane resin, a polyamide resin, a polyester resin, an acryl resin and a vinyl resin which have flexibility.

17. The fuel system as described in claim 16, wherein a blending proportion of the epoxy resin curing agent to the epoxy resin contained in the epoxy resin composition in the coating resin layer of the tube body falls in a range of 1.2 to 3.0 in terms of an equivalent ratio (active hydrogen/epoxy group) of active hydrogen contained in the epoxy resin curing agent to an epoxy group contained in the epoxy resin.

18. The fuel system as described in claim 1, wherein the coating layer is formed on at least one of the connected parts of the body selected from the fuel vessel body, the molded part bodies for the fuel vessel and the tube body for a fuel.